

Serial No. 10/605,114

Examiner: Bruce Allen Lev

Filed: 09/09/03

Group Art Unit: 3634

Page 4 of 16

**Amendments to the Claims**

Please amend the claims as shown below in the complete listing of claims.

Claim 1 (Cancelled)

2. (Amended) The lightweight roll-up door according to claim ~~1~~<sup>39</sup> wherein the snap fit fasteners comprises a compressible fasteners.

3. (Original) The roll-up door according to claim 2, wherein the compressible fastener comprises two spaced resilient fingers defining a gap therebetween and the compressible fastener is compressed by deflecting at least one of the fingers into the gap.

4. (Original) The roll-up door according to claim 3, wherein the outer cross-sectional periphery of the fastener generally conforms to the cross-sectional shape of the groove.

Claims 5-8 (Cancelled)

9. (Amended) In a roll-up door for selectively closing an opening in a trailer, the opening being defined in part by a bottom wall of the trailer, the roll-up door comprising multiple elongated panels having opposing interior and exterior walls and an upper and lower sides connecting an upper portion of the walls and a lower portion of the walls, respectively, the panels are stacked in an upper side to lower side orientation, a hinge rotatably couples adjacent panels, and one of the panels is a bottom panel whose lower side is adapted to be positioned adjacent the trailer bottom wall when the roll-up door is mounted to the trailer and in a closed position, and a latch assembly mounted to the bottom panel and adapted to be selectively coupled to the trailer to lock the roll-up door in the closed position, the improvement comprising:

the bottom panel is extruded and has a predominately hollow interior between the exterior and interior walls, the bottom panel further includes a latch recess in the exterior wall and multiple mounting supports disposed within the hollow interior and extending between the latch recess and the interior wall, and the latch assembly is received in the latch recess.

Claim 10 (Cancelled)

Serial No. 10/605,114

Examiner: Bruce Allen Lev

Filed: 09/09/03

Group Art Unit: 3634

Page 5 of 16

11. (Amended) The improvement of claim 109, wherein the latch assembly comprises a mounting plate and the latch recess has a height substantially equal to the height of the mounting plate to thereby fix the vertical position of the latch assembly when it is positioned within the latch recess.

12. (Original) The improvement of claim 11, and further comprising an alignment indicia on the front wall of the panel for use in laterally aligning the latch assembly relative to the bottom panel.

13. (Original) The improvement of claim 9, wherein the mounting supports comprise extruded walls extending between the latch recess and the interior wall and arranged in spaced pairs and defining a channel therebetween in which a fastener can be received.

14. (Original) The improvement of claim 13, wherein the spacing of the walls is such that a head of a mechanical fastener used to fasten the latch assembly to the bottom panel will overlie at least a portion of at least one of the walls of a pair.

15. (Original) The improvement of claim 14, wherein the spacing of the walls is such that it is less than the outer diameter of a threaded fastener.

16. (Amended) The improvement of claim 9, and further comprising a backing plate recess on the interior wall and at least part of the backing plate recess is opposite a portion of the latch recess.

17. (Original) The improvement according to claim 16, wherein the mounting supports extend between the latch recess and the backing plate recess.

18. (Original) The improvement according to claim 9, and further comprising a reflector recess formed in the exterior wall, located above the latch recess and of a size to receive therein a conspicuity reflector.

19. (Amended) In a roll-up door for selectively closing an opening in a trailer, the opening being defined in part by a bottom wall of the trailer, the roll-up door comprising multiple

Serial No. 10/605,114

Examiner: Bruce Allen Lev

Filed: 09/09/03

Group Art Unit: 3634

Page 6 of 16

elongated panels having opposing interior and exterior walls and an upper and lower sides connecting an upper portion of the walls and a lower portion of the walls, respectively, the panels are stacked in an upper side to lower side orientation, a hinge rotatably couples adjacent panels, and one of the panels is a bottom panel whose lower side is adapted to be positioned adjacent the trailer bottom wall when the roll-up door is mounted to the trailer and in a closed position, and a latch assembly mounted to the bottom panel and adapted to be selectively coupled to the trailer to lock the roll-up door in the closed position, the improvement comprising:

the bottom panel is extruded and has a predominately hollow interior between and exterior and interior walls, a reflector recess formed in the exterior wall, located near a bottom portion of the panel and of a size to receive therein a conspicuity reflector.

20. (Amended) A roll up door according to claim 19 wherein the bottom panel further has a latch recess in the exterior wall thereof at the bottom portion thereof and the latch assembly is mounted in the latch recess, and wherein the reflector recess is mounted above the latch recess.

21. (Amended) In a roll-up door for selectively closing an opening in a truck or trailer, the opening being defined in part by a bottom wall of the trailer, the roll-up door comprising multiple elongated panels having opposing interior and exterior walls with a relatively hollow interior and an upper and a lower sides connecting an upper portion of the walls and a lower portion of the walls, respectively, the panels are stacked in an upper side to lower side orientation, a hinge rotatably couples adjacent panels together, each of the panels has at lateral sides thereof at least a pair of wheel assemblies comprising a roller that is adapted to mount into a rail at the side of the truck or trailer opening and a wear resistant axle that is received in a socket in the panels, and one of the panels is a bottom panel whose lower side is adapted to be positioned adjacent the trailer bottom wall when the roll-up door is mounted to the trailer and in a closed position, and a latch assembly mounted to the bottom panel and adapted to be selectively coupled to the trailer to lock the roll-up door in the closed position, the improvement comprising:

a socket made of a wear resistant material attached to each of the lateral sides of the panels and receiving an axle of the wheel assembly therein.

Serial No. 10/605,114  
Filed: 09/09/03  
Page 7 of 16

Examiner: Bruce Allen Lev  
Group Art Unit: 3634

22. (Original) A roll-up door according to claim 21 wherein the sockets are formed of a wear-resistant metal.

23. (Amended) A roll up door according to claim 21 wherein the sockets further includes a mounting plate through which the sockets are mounted to the panels.

24. (Original) A roll up door according to claim 23 wherein the sockets are integrally formed with the mounting plates.

25. (Original) A roll up door according to claim 24 wherein the axles are made of metal.

26. (Amended) A roll up door according to claim 25 wherein the panels are extruded and have a uniform cross-section between the lateral sides thereof with open ends.

27. (Original) A roll up door according to claim 26 wherein the panels are formed of a rigid plastic material.

28. (Original) A roll up door according to claim 26 wherein the panels are formed of a lightweight metal.

29. (Original) A roll up door according to claim 26 and further comprising end caps that close the open ends of the panels and further comprise mounting tabs that fit within open ends of the panels.

30. (Amended) A roll up door according to claim 29 wherein the plates are fastened to the panels with mechanical fasteners that extend through the exterior and interior walls, though the mounting tabs of the end plates caps and through the socket mounting plate.

31. (Amended) A roll up door according to claim 21 wherein the panels are extruded and have a uniform cross-section between the lateral sides thereof with open ends.

32. (Original) A roll up door according to claim 31 wherein the panels are formed of a rigid plastic material.

Serial No. 10/605,114  
Filed: 09/09/03  
Page 8 of 16

Examiner: Bruce Allen Lev  
Group Art Unit: 3634

33. (Original) A roll up door according to claim 31 wherein the panels are formed of a lightweight metal.

34. (Original) A roll up door according to claim 31 and further comprising end caps that close the open ends of the panels and further comprise mounting tabs that fit within open ends of the panels.

35. (Amended) A roll up door according to claim 34 wherein the sockets further include a mounting plate through which the sockets are mounted to the panels, and the mounting plates are fastened to the panels with mechanical fasteners that extend through the exterior and interior walls, through the mounting tabs of the end plates-caps and through the socket mounting plate.

36. (Amended) A roll up door according to claim 35 wherein the end caps are made of an injected molded plastic.

37. (Original) A roll up door according to claim 21 wherein the sockets are made from a tough wear resistant plastic.

38. (New) A light weight roll-up door for use in closing a rear opening of a truck or trailer, the roll-up door comprising:

multiple elongated panels, each panel having a generally rectangular periphery having inner and outer opposing surfaces spaced from each other, an upper edge, a lower edge and opposite side edges, each of the panels having a uniform cross sectional configuration between the opposite side edges, and wherein the panels are stacked in upper edge to lower edge orientation;

a hinge assembly between the upper and lower edges of the panels for relative rotation of the panels with respect to each other about a transverse axis;

the hinge assembly comprises:

an elongated arcuate projection formed in one of the upper and lower edges of the elongated panels at an outer portion thereof and including an elongated flange portion depending therefrom; and

Serial No. 10/605,114  
Filed: 09/09/03  
Page 9 of 16

Examiner: Bruce Allen Lev  
Group Art Unit: 3634

an elongated socket positioned at the other of the upper and lower edges of the panels and including an inner surface with a curvature complementary with the curvature of the arcuate projection and an elongated hook portion;

wherein the elongated arcuate projection fits within the socket and the elongated flange rests on the elongated hook portion for relative rotation of the elongated panels with respect to each other and the elongated arcuate portion fills a gap at the facing edges of the panels as the panels rotate about the hinge.

39. (New) The light weight roll-up door according to claim 38 and further comprising at least one elongated groove integrally formed in the inner surfaces of the panels at the other of the upper and lower edges and having a retainer lip at the edge of the groove; and a hinge coupler that includes the elongated socket and has a connector with a snap fit fastener that is snap fit into the elongated groove and retained therein by the retainer lip.

40. (New) The light weight roll-up door according to claim 39 wherein the hinge coupler includes an axle mounting bracket and further comprising a wheel assembly mounted to the axle mounting bracket.

41. (New) The light weight roll-up door according to claim 40 wherein the axle mounting bracket includes an axle seat and the wheel has an axle mounted in the axle seat.

42. (New) The light weight roll-up door according to claim 41 wherein the axle seat is made from a wear-resistant material.

43. (New) The light weight roll-up door according to claim 39 wherein there are two elongated grooves formed in the panels at the other of the upper and lower edges, each of which has a retainer lip at the edge of the groove, and further comprising a second connector on the hinge coupler that is releasably retained in one of the two elongated grooves.

Serial No. 10/605,114

Examiner: Bruce Allen Lev

Filed: 09/09/03

Group Art Unit: 3634

Page 10 of 16

**Amendments to the Drawings**

Please amend the drawings as follows:

The attached sheet of drawings includes corrections to FIGS. 12 and 14. Corrected copies are also enclosed herewith.

Attachment: Replacement Sheets  
Annotated Sheets Showing Changes